

# STIC Search Report Biotech-Chem Library

## STIC Database Tracking Number: 146809

TO: Andrew D Kosar

Location: REM/3C04/3C18

Art Unit: 1654

Wednesday, March 16, 2005

Case Serial Number: 10/777179

From: Barb O'Bryen

**Location: Biotech-Chem Library** 

Remsen 1A69

Phone: 571-272-2518

pors

barbara.obryen@uspto.gov

Search Notes	
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# SEARCH REQUEST FORM Scientific and Technical Information Center

Requester's Full Name:Andr	ew D. Kosar Examiner#: _803	341 Date: 3/4/05	
Art Unit: _1654 Phone Num	nber: _(571)272-0913 Serial Numbe	er:10/777,179	
Mail Box and Bldg/Room Locatio	on: Mail: REM 3c18 Results Office: REM 3c04	s Format Preferred (circle) Paper Disk E-mail	
	ıbmitted, please prioritize sear	ches in order of need.	****
Please provide a detailed statement of the species or structures, keywords, synonym	search topic, and describe as specifically as s, acronyms, and registry numbers, and com	s possible the subject matter to be searched. Include the elenbine with the concept or utility of the invention. Define aretc., if known. Please attach a copy of the cover sheet, per	ny
Earliest Priority Filing Date: US 2	nes): <b>Hanabusa, Kenji; Suzuki,</b> l 2/13/04; 04/28/2003 japan e include all pertinent information (pare	Masahiro ent, child, divisional, or issued patent numbers)	
Please search the following:			
See the attached product claim.			
	:	138-4 266 1201/01-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	•
	·	;	
**************************************	**************************************	Vendors and cost where applicable  STN 2-39	
Searcher Phone:  Searcher Location:  Date Searcher Picked Up: 3-16-05  Date Completed: 3-16-05	AA Sequence (#)  Structure (#)  Bibliographic  Litigation	Dialog Questel/Orbit Dr. Link Lexis/Nexis	
Searcher Prep & Review Time: 20 Clerical Prep Time: 20 Online Time: 27	Full Text Patent Family Other	Sequence System WWW/Internet Other (specify)	

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### **AMENDMENTS TO THE CLAIMS**

Claim 1 (Currently Amended): A basic amino acid derivative represented by the following formula (1): (1) or a salt thereof:

$$R^{1}CONH(CH_{2})_{x}CHCOOR^{3}$$

$$| \qquad \qquad (1)$$

$$HNCO(CH_{2})_{z}CONH$$

$$| \qquad \qquad |$$

$$R^{2}CONH(CH_{2})_{y}CHCOOR^{4}$$

(In the formula, wherein R<sup>1</sup> and R<sup>2</sup> each independently is a straight-chain or branched-chain alkyl or alkenyl group having 5 to 21 carbon atoms,

R<sup>3</sup> and R<sup>4</sup> each independently is an alkyl or alkenyl group having 1 to 22 carbon atom(s), hydrogen atom, alkaline metal or alkaline earth metal in which, wherein the alkyl or alkenyl group may be either in straight-chain or branched-chain or may have a cyclic structure,

z is an integer of 0 or more and

x and y each is an integer of 2 to 4.) 4.

Claim 2 (Currently Amended): The basic amino acid derivative according to claim 1, wherein z in the above formula (1) is ranges from 0 to 10.

Claim 3 (Currently Amended). The basic amino acid according to claim 1, wherein z in the above formula (1) is 0.

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FILE "REGISERY" ENTERED AT 12:03:29 ON 16 MAR 2005
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

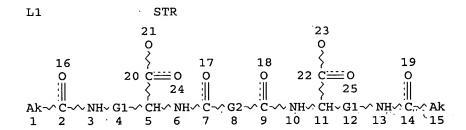
STRUCTURE FILE UPDATES: 15 MAR 2005 HIGHEST RN 845699-17-4 DICTIONARY FILE UPDATES: 15 MAR 2005 HIGHEST RN 845699-17-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html



REP G1=(2-4) CH2
REP G2=(0-20) CH2
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 1
CONNECT IS E1 RC AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M5-X21 C AT 1
ECOUNT IS M5-X21 C AT 1

**GRAPH ATTRIBUTES:** 

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 25.

STEREO ATTRIBUTES: NONE

26 SEA FIGHT-REGISTRY SSS FUL L1

100.0% PROCESSED 344396 ITERATIONS

SEARCH TIME: 00.00.26

26 Answers

=> fil capl uspatf casrea; s 13

FILE "CAPLUS" ENTERED AT 12:03:39 ON 16 MAR 2005
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FILE 'USPATFULL' ENTERED AT 12:03:39 ON 16 MAR 2005 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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L6

5 L3 (

=> dup rem 16

PROCESSING COMPLETED FOR L6

L7 4 DUP REM

4 DUP REM L6 (1 DUPLICATE REMOVED) ANSWERS '1-3' FROM FILE CAPLUS ANSWER '4' FROM FILE USPATFULL

=> d ibib ed abs hitstr 1-4; fil hom

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2003:627026 CAPLUS

DOCUMENT NUMBER:

CORPORATE SOURCE:

139:337687

TITLE:

New gemini organogelators linked by oxalyl amide: organogel formation and their thermal stabilities Suzuki, Masahiro; Nigawara, Tomomi; Yumoto, Mariko;

AUTHOR(S):

Kimura, Mutsumi; Shirai, Hirofusa; Hanabusa, Kenji Graduate School of Science and Technology, Shinshu

University, Ueda, Nagano, 386-8567, Japan

SOURCE:

Tetrahedron Letters (2003), 44(36), 6841-6843

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 139:337687

ED Entered STN: 15 Aug 2003

AB New gemini organogelators linked by an oxalyl amide that can be easily, effectively, and cheaply synthesized have good organogelation abilities and their cyclohexane gels have superior thermal stabilities; especially 7 possessing the branched alkyl ester can gel at 0.7 wt% cyclohexane even at 70°C.

IT 615584-80-0P 615584-81-1P 615584-82-2P 615584-83-3P 615584-84-4P 615584-85-5P

615584-86-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (NMR and FT-IR on gelation of prepared gemini oxalyl-amide linked organogelators)

RN 615584-80-0 CAPLUS

CN L-Lysine, N2, N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

RN 615584-81-1 CAPLUS

CN L-Lysine, N2, N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Eto 
$$S$$
  $(CH_2)_4$   $N$   $(CH_2)_{10}$   $M$   $(CH_2$ 

RN 615584-82-2 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, dihexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me 
$$(CH_2)_5$$
  $(CH_2)_4$   $(CH_2)_{10}$   $(CH$ 

RN 615584-83-3 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, didecyl ester (9CI) (CA INDEX NAME)

RN 615584-84-4 CAPLUS CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, didodecyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 615584-85-5 CAPLUS
CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-,
bis(2-ethylhexyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me 
$$(CH_2)_{10}$$
  $(CH_2)_4$   $(CH$ 

RN 615584-86-6 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, bis(3,5,5-trimethylhexyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me 
$$(CH_2)_{10}$$
 NH  $(CH_2)_4$  S N  $(CH_2)_4$  S NH  $(CH_2)_4$  S NH  $(CH_2)_4$  S NH  $(CH_2)_4$  Me  $(CH_2)_4$  Me  $(CH_2)_4$  Me

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:930925 CAPLUS

DOCUMENT NUMBER: 141:400475

TITLE: Basic amino acid derivatives as gelation agents

INVENTOR(S): Hanabusa, Kenji; Suzuki, Masahiro

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan Eur. Pat. Appl., 13 pp. SOURCE: CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIND DATE		APPLICATION NO.												
EP	EP 1473027			A1 20041103		EP 2004-3189					,						
							ES,										
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑL,	TR,	BG,	CZ,	EE,	HU,	SK	
WO	WO 2004096754			A1 20041111			WO 2003-JP5453						20030428				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					-
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
JP	2004	3235	05		A2		2004	1118		JP 2	004-	2787	3		20	0040	204
US	2004	2488	12		A1		2004	1209	•	US 2	004-	7771	79 `		20	0040	213
PRIORIT	Y APP	LN.	INFO	. :					1	WO 2	003-	JP54	53	7	A 20	00304	428
OTHER S	OURCE	(S):			MARI	PAT	141:	4004	75								

ED Entered STN: 06 Nov 2004

AB The basic amino acid derivative is described which is able to gel or solidify various liquid organic media or liquid aqueous media. There is provided a gelling agent or a solidifying agent being easily synthesized by a simple method and giving a gelled product an excellent stability for a long period at

ambient temperature Gel and perfumery/cosmetic compns. containing the basic amino acid derivative are also provided. Exemplary derivs. are bis(lauroyl-lysine) derivs.

IT 615584-80-0P 615584-85-5P 615584-86-6P

785816-56-0P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of basic amino acid derivs. as gelation agents)

RN 615584-80-0 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}$$
  $_{H}$  (CH<sub>2</sub>)  $_{4}$   $_{S}$   $_{N}$   $_{NH}$   $_{HO_{2}C}$   $_{S}$  (CH<sub>2</sub>)  $_{4}$   $_{N}$   $_{O}$  (CH<sub>2</sub>)  $_{10}$   $_{Me}$ 

RN 615584-85-5 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, bis(2-ethylhexyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 615584-86-6 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, bis(3,5,5-trimethylhexyl) ester (9CI) (CA INDEX NAME)

Me 
$$(CH_2)_{10}$$
 NH  $(CH_2)_4$  S NH  $(CH_2)_4$  S NH  $(CH_2)_{10}$  Me  $(CH_2)_{10}$  Me  $(CH_2)_{10}$  Me

RN 785816-56-0 CAPLUS

CN L-Lysine, N2,N2'-(1,5-dioxo-1,5-pentanediyl)bis[N6-(1-oxododecyl)-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●x Na

PAGE 1-B

IT 658051-86-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of basic amino acid derivs. as gelation agents)

RN 658051-86-6 CAPLUS

CN L-Lysine, N2,N2'-(1,5-dioxo-1,5-pentanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

Me 
$$(CH_2)_{10}$$
  $(CH_2)_4$   $(CH_2)_4$   $(CH_2)_3$   $(CH_2)_4$   $(CH$ 

PAGE 1-B

/ (CH<sub>2</sub>)<sub>10</sub>

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS 8 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

2003:878000 CAPLUS ACCESSION NUMBER:

140:181736 DOCUMENT NUMBER:

L-Lysine based gemini organogelators: their TITLE:

organogelation properties and thermally stable

organogels

Suzuki, Masahiro; Nigawara, Tomomi; Yumoto, Mariko; AUTHOR(S):

Kimura, Mutsumi; Shirai, Hirofusa; Hanabusa, Kenji Graduate School of Science and Technology, Shinshu

CORPORATE SOURCE: University, Ueda, Nagano, 386-8567, Japan

Organic & Biomolecular Chemistry (2003), 1(22), SOURCE:

4124-4131

CODEN: OBCRAK; ISSN: 1477-0520

Royal Society of Chemistry PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE: Entered STN: 10 Nov 2003 ED

Novel gemini organogelators based on L-lysine, in which two L-lysine AB derivs. are linked by different alkylene chain lengths through the amide bond, have been simply and effectively synthesized, and their organogelation abilities and thermal stabilities have been investigated. In a series of L-lysine Et ester derivs., the organogelation abilities decreased with increasing alkylene spacer length. In particular, bis(Ne-lauroyl-L-lysine Et ester)oxalyl amide, H23C11CONH(CH2)4CH(CO2Et)NH-COCO-NHCH(CO2Et)(CH2)4NHCOC11H23, is a good organogelator that gels most organic solvents such as alcs., cyclic ethers, aromatic solvents and acetonitrile. Various oxalyl amide derivs. with different alkyl ester groups such as hexyl, decyl, dodecyl, 2-ethyl-1-hexyl and 3,5,5-trimethylhexyl also showed good organogelation

abilities. Furthermore, it was found that the cyclohexane gels formed by some oxalyl amide derivs. have a high thermal stability. 615584-80-0P 615584-81-1P 615584-82-2P

IT 615584-83-3P 615584-84-4P 615584-85-5P 615584-86-6P 658051-84-4P 658051-85-5P 658051-86-6P 658051-87-7P 658051-88-8P 658051-89-9P 658051-90-2P 658051-91-3P 658051-92-4P 658051-93-5P 658051-94-6P 658051-95-7P 658051-96-8P 658051-97-9P 658051-98-0P 658051-99-1P 658052-00-7P 658052-01-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, organogelation property and thermal stability of bis-lysine amides linked by alkylene chains)

RN 615584-80-0 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 615584-81-1 CAPLUS

CN L-Lysine, N2, N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 615584-82-2 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, dihexyl ester (9CI) (CA INDEX NAME)

Page 10

RN 615584-83-3 CAPLUS CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, didecyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me 
$$(CH_2)_{9}$$
  $(CH_2)_{4}$   $(CH_2)_{10}$   $(CH_2)_{10}$ 

RN 615584-84-4 CAPLUS CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, didodecyl ester (9CI) (CA INDEX NAME)

RN 615584-85-5 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, bis(2-ethylhexyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}$$
  $_{H}$  (CH<sub>2</sub>)  $_{4}$   $_{S}$   $_{N}$   $_$ 

RN 615584-86-6 CAPLUS

CN L-Lysine, N2,N2'-(1,2-dioxo-1,2-ethanediyl)bis[N6-(1-oxododecyl)-, bis(3,5,5-trimethylhexyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me 
$$(CH_2)_{10}$$
 NH  $(CH_2)_4$  S N  $(CH_2)_4$  S NH  $(CH_2)_{10}$  Me  $(CH_2)_{10}$  Me

RN 658051-84-4 CAPLUS

CN L-Lysine, N2,N2'-(1,3-dioxo-1,3-propanediyl)bis[N6-(1-oxododecyl)- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>)<sub>10</sub> 
$$\stackrel{H}{\underset{O}{\text{H}}}$$
 (CH<sub>2</sub>)<sub>4</sub>  $\stackrel{CO_2H}{\underset{H}{\text{O}}}$   $\stackrel{O}{\underset{HO_2C}{\text{O}}}$   $\stackrel{NH}{\underset{HO_2C}{\text{H}}}$   $\stackrel{H}{\underset{O}{\text{H}}}$ 

PAGE 1-B

RN 658051-85-5 CAPLUS CN L-Lysine, N2,N2'-(1,4-dioxo-1,4-butanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 658051-86-6 CAPLUS CN L-Lysine, N2,N2'-(1,5-dioxo-1,5-pentanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

Me (CH<sub>2</sub>)<sub>10</sub> 
$$\stackrel{H}{\underset{O}{\text{N}}}$$
 (CH<sub>2</sub>) $\stackrel{CO_2H}{\underset{H}{\text{O}}}$   $\stackrel{O}{\underset{CH_2}{\text{CH}}}$   $\stackrel{CO_2H}{\underset{H}{\text{O}}}$   $\stackrel{O}{\underset{CH_2}{\text{CH}}}$   $\stackrel{H}{\underset{N}{\text{NH}}}$ 

PAGE 1-B

RN 658051-87-7 CAPLUS
CN L-Lysine, N2,N2'-(1,6-dioxo-1,6-hexanediyl)bis[N6-(1-oxododecyl)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>)<sub>10</sub> 
$$\stackrel{H}{\underset{O}{\text{N}}}$$
 (CH<sub>2</sub>)<sub>4</sub>  $\stackrel{CO_2H}{\underset{H}{\text{N}}}$  (CH<sub>2</sub>)<sub>4</sub>  $\stackrel{O}{\underset{H}{\text{N}}}$  (CH<sub>2</sub>)<sub>4</sub>  $\stackrel{H}{\underset{N}{\text{N}}}$   $\stackrel{H}{\underset{N}{\text{N}}}$ 

PAGE 1-B

RN 658051-88-8 CAPLUS
CN L-Lysine, N2,N2'-(1,7-dioxo-1,7-heptanediyl)bis[N6-(1-oxododecyl)- (9CI)
(CA INDEX NAME)

Kosar 10/777179

Page 14

Me 
$$(CH_2)_{10}$$
  $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_5$   $(CH_2)_4$   $(CH_2)_4$   $(CH_2)_5$   $(CH$ 

PAGE 1-B

RN 658051-89-9 CAPLUS CN L-Lysine, N2,N2'-(1,8-dioxo-1,8-octanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>) 10 
$$\stackrel{\text{H}}{\underset{\text{O}}{\text{NH}}}$$
 (CH<sub>2</sub>)  $\stackrel{\text{CO}_2\text{H}}{\underset{\text{H}}{\text{O}}}$  (CH<sub>2</sub>)  $\stackrel{\text{CO}_2\text{H}}{\underset{\text{H}}{\text{O}}}$  (CH<sub>2</sub>)  $\stackrel{\text{H}}{\underset{\text{H}}{\text{O}}}$  (CH<sub>2</sub>)  $\stackrel{\text{H}}{\underset{\text{H}}{\text{O}}}$ 

PAGE 1-B

$$/$$
 (CH<sub>2</sub>)<sub>10</sub> Me

RN 658051-90-2 CAPLUS CN L-Lysine, N2,N2'-(1,9-dioxo-1,9-nonanediyl)bis[N6-(1-oxododecyl)- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 658051-91-3 CAPLUS
CN L-Lysine, N2,N2'-(1,10-dioxo-1,10-decanediyl)bis[N6-(1-oxododecyl)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 658051-92-4 CAPLUS CN L-Lysine, N2,N2'-(1,12-dioxo-1,12-dodecanediyl)bis[N6-(1-oxododecyl)-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Absolute stereochemistry.

PAGE 1-B

RN 658051-94-6 CAPLUS
CN L-Lysine, N2,N2'-(1,4-dioxo-1,4-butanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

RN 658051-95-7 CAPLUS
CN L-Lysine, N2,N2'-(1,5-dioxo-1,5-pentanediyl)bis[N6-(1-oxododecyl)-,
diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}^{0}$$
  $_{H}^{0}$  (CH<sub>2</sub>)  $_{4}^{0}$   $_{N}^{0}$  (CH<sub>2</sub>)  $_{3}^{0}$   $_{N}^{0}$   $_{N$ 

PAGE 1-B

$$-$$
 (CH<sub>2</sub>)  $10$  Me

RN 658051-96-8 CAPLUS
CN L-Lysine, N2,N2'-(1,6-dioxo-1,6-hexanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

Me (CH<sub>2</sub>) 
$$\frac{1}{10}$$
  $\frac{1}{10}$   $\frac{1}{10}$ 

$$-$$
 (CH<sub>2</sub>)  $10$ 

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}^{0}$$
  $_{H}^{0}$  (CH<sub>2</sub>)  $_{4}^{0}$   $_{N}^{0}$   $_{N}^{0}$  (CH<sub>2</sub>)  $_{5}^{0}$   $_{N}^{0}$   $_{N$ 

PAGE 1-B

$$\sim$$
 (CH<sub>2</sub>)  $10$ 

RN 658051-98-0 CAPLUS
CN L-Lysine, N2,N2'-(1,8-dioxo-1,8-octanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

Me (CH<sub>2</sub>) 
$$_{10}$$
  $_{H}$  (CH<sub>2</sub>)  $_{4}$   $_{S}$   $_{N}$  (CH<sub>2</sub>)  $_{6}$   $_{O}$  NH

RN 658051-99-1 CAPLUS
CN L-Lysine, N2,N2'-(1,9-dioxo-1,9-nonanediyl)bis[N6-(1-oxododecyl)-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}^{0}$$
  $_{H}^{0}$  (CH<sub>2</sub>)  $_{4}^{0}$   $_{N}^{0}$   $_{N}^{0}$  (CH<sub>2</sub>)  $_{7}^{0}$   $_{N}^{0}$   $_{N$ 

PAGE 1-B

$$-$$
 (CH<sub>2</sub>) $\frac{}{10}$  Me

Absolute stereochemistry.

Me (CH<sub>2</sub>) 
$$_{10}^{N}$$
  $_{H}^{N}$  (CH<sub>2</sub>)  $_{4}^{N}$   $_{N}^{N}$  (CH<sub>2</sub>)  $_{10}^{N}$   $_{N}^{N}$   $_{N}^{N}$  (CH<sub>2</sub>)  $_{10}^{N}$   $_{N}^{N}$   $_{N}^{N}$ 

PAGE 1-B

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L7 ANSWER 4 OF 4 USPATFULL on STN

ACCESSION NUMBER:

2004:315136 USPATFULL

TITLE: INVENTOR(S): Basic amino acid derivatives Hanabusa, Kenji, Ueda-shi, JAPAN Suzuki, Masahiro, Ueda-shi, JAPAN

PATENT ASSIGNEE(S):

AJINOMOTO CO. INC, Tokyo, JAPAN (non-U.S. corporation)

NUMBER

KIND DATE